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10/720,960	11/24/2003	Richard D. Dettinger	ROC920030277US1	5201
46797 7590 02/19/2010 IBM CORPORATION, INTELLECTUAL PROPERTY LAW DEPT 917, BLDG. 006-1 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829				
EXAMINER				
DWTVEDI, MAHESH H				
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02/19/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/720,960

**Applicant(s)**

DETTINGER ET AL.

**Examiner**

MAHESH H. DWIVEDI

**Art Unit**

2168

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-12, 14-21 and 27-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-12, 14-21 and 27-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/4/2010
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/02/2010 has been entered.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 02/04/2010 has been received, entered into the record, and considered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Remarks***

3. Receipt of Applicant's Amendment, filed on 02/02/2010, is acknowledged. The amendment includes amending the specification, the cancellation of Claims 1-9, 13, and 22-26, and amending Claims 10, 20-21, and 27, and the addition of claims 30-32.

#### ***Claim Objections***

4. Claim 20 is objected to because of the following informalities: The examiner suggests that applicants change "obtaining a list of functional modules accessible from within the application" to "obtaining a list of functional modules accessible from within the application;". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 10-12, 14-21, and 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Win et al.** (U.S. Patent 6,453,353) and in view of **Faybishenko et al.** (U.S. PG PUB 2003/0158839).

8. Regarding claim 10, **Win** teaches a method comprising:

A) assigning metadata requirements to functional modules that operate on data stored in, or functional modules that generate results that are stored in, a database (Abstract, Column 5, lines 44-46, Column 6, lines 10-16, lines 41-65);

B) wherein the assigned metadata requirements specify conditions required for successful execution of the functional module (Abstract, Column 5, lines 44-46, Column 6, lines 10-16, lines 41-65);

C) wherein at least one condition defines at least one user role required for successful execution of the functional module (Abstract, Column 5, lines 44-46, Column 6, lines 10-16, lines 41-65);

F) obtaining a list of functional modules that are accessible from within the application used during the query session (Abstract, Column 6, lines 10-16, lines 41-65);

G) identifying a limited subset of the functional modules in the list that will successfully execute, by comparing the collected runtime metadata with the assigned metadata requirements (Abstract, Column 6, lines 10-16, lines 41-65); and

H) providing an interface presenting the user with the identified limited subset of functional modules that will successfully execute (Abstract, Column 6, lines 10-16, lines 41-65).

The examiner notes that **Win** teaches **“assigning metadata requirements to functional modules that operate on data stored in, or functional modules that generate results that are stored in, a database”** as “Roles determine what resources a User can access. Further, each role may require a set of information that is available in resources” (Column 5, lines 44-46) and “When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with resources protected by the Runtime Module decrypts information in the cookie and uses it to verify that he user is authorized to access the resource” (Column 6, lines 58-64). The examiner further notes that **Win** teaches **“wherein the assigned metadata requirements specify conditions required for successful execution of the functional module”** as “the runtime module on the protected server receives the login request and intercepts all other request by the client to use a resource” (Abstract), “If the name and password are correct, the Authentication Client Module reads the user’s roles from the Registry server” (Column 6, lines 44-46), and “a personalized menu is an HTML page containing a list of authorized Resources” (Column 6, lines 13-14). The examiner further notes that **Win** teaches **“wherein at least one condition defines at least one user role required for successful; execution of the functional module”** as “the runtime module on the protected server receives the login request and intercepts all other request by the client to use a resource” (Abstract), “If the name and password are correct, the Authentication Client Module reads the user’s roles from the Registry server” (Column 6, lines 44-46), and “a personalized menu is an HTML page containing a list of authorized Resources” (Column 6, lines 13-14). The examiner further notes that **Win** teaches **“obtaining a list of functional modules that are accessible from within the application used during the query session”** as “When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with resources protected by the Runtime Module decrypts information in the cookie and uses it to verify that he user is authorized to access the resource” (Column 6, lines 58-64). The examiner further notes that **Win** teaches **“identifying a limited subset of the functional modules in the list that will successfully execute, by**

**comparing the collected runtime metadata with the assigned metadata requirements**” as “a Personalized Menu is an HTML page containing a list of authorized resources. The Personalized Menus displays only Resources to which the User has access” (Column 6, lines 12-15) and “When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with resources protected by the Runtime Module decrypts information in the cookie and uses it to verify that he user is authorized to access the resource” (Column 6, lines 58-64). The examiner further notes that **Win** teaches “**providing an interface presenting the user with the identified limited subset of functional modules that will successfully execute**” as “a Personalized Menu is an HTML page containing a list of authorized resources. The Personalized Menus displays only Resources to which the User has access” (Column 6, lines 12-15).

**Win** does not explicitly teach:

- D) collecting runtime metadata relating to one or more result fields of a query; and
- E) wherein the metadata is collected after composition of the query.

**Faybishenko**, however, teaches “**collecting runtime metadata relating to one or more result fields of a query**” as “In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document” (Paragraph 112) and “**wherein the metadata is collected after composition of the query**” as “In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface

may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document" (Paragraph 112).

The examiner further notes that storing the number of hits of a query (i.e., number of records returned) teaches the claimed one or more result fields of a query.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 11, **Win** does not explicitly teach a method comprising:

A) wherein the runtime metadata comprises attributes of fields involved in a query or query results.

**Faybishenko**, however, teaches "**wherein the runtime metadata comprises attributes of fields involved in a query or query results**" as "In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for

example to read at least part of the registration document or to write to replace or to add to at least part of the registration document" (Paragraph 112).

The examiner further notes that storing the queries used by users teaches the claimed storing of attributes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 12, **Win** does not explicitly teach a method comprising:

A) wherein the runtime metadata comprises content contained in query results.

**Faybishenko**, however, teaches "**wherein the runtime metadata comprises content contained in query results**" as "In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document" (Paragraph 112).

The examiner further notes that storing the results of queries teaches the claimed content contained in query results.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control



over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 14, **Win** further teaches a method comprising:

A) wherein obtaining metadata associated with the functional module comprises examining a signature validation (Column 6, lines 1-3, Column 14, lines 34-43).

The examiner notes that **Win** teaches “**wherein obtaining metadata associated with the functional module comprises examining a signature validation**” as “users may log in either with a digital certificate or by opening a login page URL with a web browser and entering a name and password” (Column 6, lines 1-3).

Regarding claim 15, **Win** further teaches a method comprising:

A) wherein the metadata associated with at least one of the functional modules comprises at least one of: one or more input parameters required for successful execution of the functional module, one or more output parameters required for successful execution of the functional module, and a security credential required to execute the functional module (Abstract, Column 6, lines 10-16, lines 41-65).

The examiner notes that **Win** teaches “**wherein the metadata associated with at least one of the functional modules comprises at least one of one or more input parameters required for successful execution of the functional module; one or more output parameters required for successful execution of the functional module; and a credential of a user authorized to execute the functional module**” as “The Authentication Client Module and Access Menu Module authenticates a user by verifying the name and password with the Registry Server 108” (Column 6, lines 42-44).

Regarding claim 16, **Win** does not explicitly teach a method comprising:

A) wherein at least one of the functional modules analyzes query results.

**Faybishenko**, however, teaches “**wherein at least one of the functional modules analyzes query results**” as “In one embodiment a QRP adapter may monitor

or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document" (Paragraph 112).

The examiner further notes that storing the click history of users teaches the claimed analyzing of query results.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 17, **Win** does not explicitly teach a method comprising:

- A) the runtime metadata comprises the names of fields in a result set; and
- B) the limited subset of functional modules comprises functional modules requiring data from fields in the result set as inputs.

**Faybishenko**, however, teaches "**the runtime metadata comprises the names of fields in a result set**" as "This registers a provider 120 with the text queryspace, specified by <http://bigbookseller.com/search>. This registration registers the provider for the following queries: any query containing "John Doe" or "Jane Doe" in the <author>field and any query containing "Foobar", "Gadgets", or "Widgets" in the <title>field. Queries matching these conditions may be directed to the query server running at <http://littlebookseller.com/exec/search>. Predicates may be much larger than this exemplary predicate, and may also contain more complex structure" (Paragraphs

108-109) and "In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document" (Paragraph 112), and **"the limited subset of functional modules comprises functional modules requiring data from fields in the result set as inputs"** as "This registers a provider 120 with the text queryspace, specified by <http://bigbookseller.com/search>. This registration registers the provider for the following queries: any query containing "John Doe" or "Jane Doe" in the <author>field and any query containing "Foobar", "Gadgets", or "Widgets" in the <title>field. Queries matching these conditions may be directed to the query server running at <http://littlebookseller.com/exec/search>. Predicates may be much larger than this exemplary predicate, and may also contain more complex structure" (Paragraphs 108-109) and "In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document" (Paragraph 112)

The examiner further notes that specifying a specific query space via a registration file for the inputs in an author/title field teaches the claimed requirements from data inputs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 18, **Win** does not explicitly teach a method comprising:

A) wherein the runtime metadata comprises information related to a query building session.

**Faybishenko**, however, teaches “**wherein the runtime metadata comprises information related to a query building session**” as “In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document” (Paragraph 112)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 19, **Win** does not explicitly teach a method comprising:

- A) wherein the information related to the query building session comprises a specified focus of the query; and
- B) identifying a limited subset of the functional modules that will successfully execute comprises identifying functional modules associated with the specified focus.

**Faybishaenkoak**, however, teaches **“wherein the information related to the query building session comprises a specified focus of the query”** as “In some embodiments, queries may be resolved by a resolver 102 in the network by matching query terms to registration terms. In some embodiments, the resolver 102 may use simple keyword based matching of query terms to registrations. In other embodiments, the resolver may be extended, for example, to allow for category based matching of terms to registrations and/or adaptive learning of provider performance, e.g. learning which providers return relevant results given certain kinds of queries. Providers 120 whose registration terms match the query terms may be returned by the resolver 102. The hub 100 may include metadata associated with the providers 120, including the provider descriptions registered with the hub 100. This metadata may be used to determine the qualified provider(s) 120. The hub 100 then may send the query to the provider(s) 120 it has determined to be qualified. Each provider 120 that receives the query may process the received query and send one or more responses to the hub 100. The hub 100 may receive the responses and route them to the consumer 140 that initiated the query” (Paragraph 51), and **“identifying a limited subset of the functional modules that will successfully execute comprises identifying functional modules associated with the specified focus”** as “In some embodiments, queries may be resolved by a resolver 102 in the network by matching query terms to registration terms. In some embodiments, the resolver 102 may use simple keyword based matching of query terms to registrations. In other embodiments, the resolver may be extended, for example, to allow for category based matching of terms to registrations and/or adaptive learning of provider performance, e.g. learning which providers return relevant results given certain kinds of queries. Providers 120 whose registration terms match the query terms may be returned by the resolver 102. The hub 100 may include

metadata associated with the providers 120, including the provider descriptions registered with the hub 100. This metadata may be used to determine the qualified provider(s) 120. The hub 100 then may send the query to the provider(s) 120 it has determined to be qualified. Each provider 120 that receives the query may process the received query and send one or more responses to the hub 100. The hub 100 may receive the responses and route them to the consumer 140 that initiated the query" (Paragraph 51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 20, **Win** teaches computer readable storage medium comprising:

- A) assigning metadata requirements to functional modules that operate on data stored in, or functional modules that generate results that are stored in, a database (Abstract, Column 5, lines 44-46, Column 6, lines 10-16, lines 41-65);
- B) wherein the assigned metadata requirements specify conditions required for successful execution of the functional module (Abstract, Column 5, lines 44-46, Column 6, lines 10-16, lines 41-65);
- C) wherein at least one condition defines at least one user role required for successful execution of the functional module (Abstract, Column 5, lines 44-46, Column 6, lines 10-16, lines 41-65);
- E) obtaining a list of functional modules accessible from within the application (Abstract, Column 6, lines 10-16, lines 41-65);
- F) identifying a limited subset of the functional modules that will successfully execute, by comparing the collected runtime metadata with the assigned metadata requirements (Abstract, Column 6, lines 10-16, lines 41-65); and

G) providing an interface presenting the user with the identified limited subset of functional modules that will successfully execute (Abstract, Column 6, lines 10-16, lines 41-65).

The examiner notes that **Win** teaches **“assigning metadata requirements to functional modules that operate on data stored in, or functional modules that generate results that are stored in, a database”** as “Roles determine what resources a User can access. Further, each role may require a set of information that is available in resources” (Column 5, lines 44-46) and “When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with resources protected by the Runtime Module decrypts information in the cookie and uses it to verify that he user is authorized to access the resource” (Column 6, lines 58-64). The examiner further notes that **Win** teaches **“wherein the assigned metadata requirements specify conditions required for successful execution of the functional module”** as “the runtime module on the protected server receives the login request and intercepts all other request by the client to use a resource” (Abstract), “If the name and password are correct, the Authentication Client Module reads the user’s roles from the Registry server” (Column 6, lines 44-46), and “a personalized menu is an HTML page containing a list of authorized Resources” (Column 6, lines 13-14). The examiner further notes that **Win** teaches **“wherein at least one condition defines at least one user role required for successful; execution of the functional module”** as “the runtime module on the protected server receives the login request and intercepts all other request by the client to use a resource” (Abstract), “If the name and password are correct, the Authentication Client Module reads the user’s roles from the Registry server” (Column 6, lines 44-46), and “a personalized menu is an HTML page containing a list of authorized Resources” (Column 6, lines 13-14). The examiner further notes that **Win** teaches **“obtaining a list of functional modules accessible from within the application”** as “a list of authorized resources” (Column 6, lines 13-14) and “When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with resources protected by the Runtime Module

decrypts information in the cookie and uses it to verify that he user is authorized to access the resource" (Column 6, lines 58-64). The examiner further notes that **Win** teaches **"identifying a limited subset of the functional modules that will successfully execute, by comparing the collected runtime metadata with the assigned metadata requirements"** as "a Personalized Menu is an HTML page containing a list of authorized resources. The Personalized Menus displays only Resources to which the User has access" (Column 6, lines 12-15) and "When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with resources protected by the Runtime Module decrypts information in the cookie and uses it to verify that he user is authorized to access the resource" (Column 6, lines 58-64). The examiner further notes that **Win** teaches **"providing an interface presenting the user with the identified limited subset of functional modules that will successfully execute"** as "a Personalized Menu is an HTML page containing a list of authorized resources. The Personalized Menus displays only Resources to which the User has access" (Column 6, lines 12-15).

**Win** does not explicitly teach:

D) collecting runtime metadata relating to one or more result fields of a query.

**Faybishenko**, however, teaches **"collecting runtime metadata relating to one or more result fields of a query"** as "In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document" (Paragraph 112).



The examiner further notes that storing the number of hits of a query (i.e., number of records returned) teaches the claimed one or more result fields of a query.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 21, **Win** does not explicitly teach a computer readable storage medium comprising:

A) wherein the application is a query building application.

**Faybishenko**, however, teaches "**wherein the application is a query building application**" as "In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document" (Paragraph 112)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 27, **Win** teaches a data processing system comprising:

- A) a data repository (Column 5, lines 13-15);
- B) a plurality of functional modules, each having associated metadata requirements that specify conditions required for successful execution of the functional modules (Abstract, Column 6, lines 10-16, lines 41-65);
- C) wherein at least one condition defines at least one user role required for successful execution of the functional modules (Abstract, Column 5, lines 44-46, Column 6, lines 10-16, lines 41-65);
- D) an application from which the functional modules are accessible (Abstract, Column 6, lines 10-16, lines 41-65);
- F) present to a user a limited subset of the functional modules that will successfully execute, as determined by the application based on the collected runtime metadata and the metadata requirements associated with the functional modules (Abstract, Column 5, lines 66-67-Column 6, lines 1-16).

The examiner notes that Win teaches **“a data repository”** as “The system 2 enables organizations to register information sources or Resources and register Users of the information in a central repository” (Column 5, lines 13-15). The examiner further notes that Win teaches **“a plurality of functional modules, each having associated metadata requirements that specify conditions required for successful execution of the functional modules”** as “a list of authorized resources” (Column 6, lines 13-14). The examiner further notes that Win teaches **“an application from which the functional modules are accessible”** as “a personalized menu is an HTML page containing a list of authorized Resources” (Column 6, lines 13-14). The examiner further notes that Win teaches **“wherein at least one condition defines at least one user role required for successful execution of the functional modules”** as “the runtime module on the protected server receives the login request and intercepts all other request by the client to use a resource” (Abstract), “If the name and password are correct, the Authentication Client Module reads the user’s roles from the Registry server” (Column 6, lines 44-46), and “a personalized menu is an HTML page containing a list of authorized Resources” (Column 6, lines 13-14). The examiner further notes that Win teaches **“present to a user a limited subset of the functional modules that will**

**successfully execute, as determined by the application based on the collected runtime metadata and the metadata requirements associated with the functional modules”** as “the runtime module on the protected server receives the login request and intercepts all other request by the client to use a resource” (Abstract), “If the name and password are correct, the Authentication Client Module reads the user’s roles from the Registry server” (Column 6, lines 44-46), and “a personalized menu is an HTML page containing a list of authorized Resources” (Column 6, lines 13-14).

**Win** does not explicitly teach:

E) wherein the application is configured to: collect runtime metadata related to one or more result fields of a query after composition of the query.

**Faybishenko**, however, teaches “**wherein the application is configured to: collect runtime metadata related to one or more result fields of a query after composition of the query**” as “In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document” (Paragraph 112).

The examiner further notes that storing the number of hits of a query (i.e., number of records returned) teaches the claimed one or more result fields of a query.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko’s** would have allowed **Win’s** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 28, **Win** does not explicitly teach a data processing system comprising:

A) wherein the data repository comprises XML data structures used to store runtime metadata.

**Faybishenko**, however, teaches “**wherein the data repository comprises XML data structures used to store runtime metadata**” as “In some embodiments, users and end applications (consumers 140) may present queries to a distributed information discovery network as arbitrary XML. Schema selection may be performed by HTTP header specification, in some embodiments. In one embodiment, queries presented by consumers 140 may adhere to specific queryspaces. In some embodiments, queries may be routed to the appropriate provider 120 by sending requests (e.g. XML requests) over HTTP” (Paragraph 54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko’s** would have allowed **Win’s** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 29, **Win** further teaches a data processing system comprising:  
A) wherein the data repository comprises relational database tables used to store runtime metadata (Column 5, lines 13-15, Column 7, lines 1-6).

The examiner notes that **Win** teaches “**wherein the data repository comprises relational database tables used to store runtime metadata**” as “The Registry Repository is structured as a database. For example, the Registry Repository may be an SQL Server relational database management system, the Oracle 7® database, etc.” (Column 7, lines 1-6). The examiner further notes that it is common knowledge that relational databases store data in tables.

Regarding claim 30, **Win** does not explicitly teach a method comprising:

A) wherein the runtime metadata relating to one or more result fields of the query comprises one or more of: a result field name, a data type for the result field, and a number of records returned.

**Faybishenko**, however, teaches “**wherein the runtime metadata relating to one or more result fields of the query comprises one or more of: a result field name, a data type for the result field, and a number of records returned**” as “In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document” (Paragraph 112).

The examiner further notes that storing the number of hits of a query (i.e., number of records returned) teaches the claimed one or more result fields of a query.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 31, **Win** does not explicitly teach a computer readable storage medium comprising:

A) wherein the runtime metadata relating to one or more result fields of the query comprises one or more of: a result field name, a data type for the result field, and a number of records returned.

**Faybishenko**, however, teaches “**wherein the runtime metadata relating to one or more result fields of the query comprises one or more of: a result field name, a data type for the result field, and a number of records returned**” as “In one embodiment a QRP adapter may monitor or log queries, results, number of hits, searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document” (Paragraph 112).

The examiner further notes that storing the number of hits of a query (i.e., number of records returned) teaches the claimed one or more result fields of a query.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko’s** would have allowed **Win’s** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

Regarding claim 32, **Win** does not explicitly teach a data processing system comprising:

A) wherein the runtime metadata relating to one or more result fields of the query comprises one or more of: a result field name, a data type for the result field, and a number of records returned.

**Faybishenko**, however, teaches “**wherein the runtime metadata relating to one or more result fields of the query comprises one or more of: a result field name, a data type for the result field, and a number of records returned**” as “In one embodiment a QRP adapter may monitor or log queries, results, number of hits,

searches, results, etc. or generally the information passing through the QRP adapter. In one embodiment, a user interface may be provided through which providers may view the results of searches and hits performed by consumers--e.g. how many searches resulted in their entry being returned, how many users clicked through, etc. In one embodiment, a user interface may be provided through which providers may monitor and/or control the number of queries sent to them and also to throttle traffic (e.g. turn it off) if necessary. In some embodiments, a QRP interface may be able to access a registration file, for example to read at least part of the registration document or to write to replace or to add to at least part of the registration document" (Paragraph 112).

The examiner further notes that storing the number of hits of a query (i.e., number of records returned) teaches the claimed one or more result fields of a query.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Faybishenko's** would have allowed **Win's** to provide a method to allow for more control over content provided over the internet to providers, as noted by **Faybishenko** (Paragraph 6).

### ***Response to Arguments***

10. Applicant's arguments filed on 08/18/2006 have been fully considered but they are not persuasive.

Applicant goes on to argue on page 10, that **"Win does not disclose identifying a subset of functional modules base don a comparison of collected runtime metadata with metadata requirements that specify conditions required for successful execution of the functional modules, as specified in independent**

**claims 20 and 27"**. However, the examiner wishes to point to Column 6 of **Win** and refer to the second paragraph which states "a Personalized Menu is an HTML page containing a list of authorized resources. The Personalized Menus displays only Resources to which the User has access" (Column 6, lines 12-15). The examiner further wishes to point to Column 6 of **Win** and refer to the seventh paragraph which states "When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with resources protected by the Runtime Module decrypts information in the cookie and uses it to verify that he user is authorized to access the resource" (Column 6, lines 58-64). The examiner further wishes to state that the **Win's** method clearly compares received metadata (see user inputted metadata) with required metadata (see stored passwords and roles) to output an appropriate set of resources via an HTML interface, based on the user's role.

Applicant goes on to argue on page 10, that **"Applicants submit, however, that Win does not teach limiting functional modules (resources) that will successfully execute based on a comparison of collected runtime metadata and metadata requirements associated with the functional modules"**. However, the examiner wishes to point to Column 6 of **Win** and refer to the second paragraph which states "a Personalized Menu is an HTML page containing a list of authorized resources. The Personalized Menus displays only Resources to which the User has access" (Column 6, lines 12-15). The examiner further wishes to point to Column 6 of **Win** and refer to the seventh paragraph which states "When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with resources protected by the Runtime Module decrypts information in the cookie and uses it to verify that he user is authorized to access the resource" (Column 6, lines 58-64). The examiner further wishes to state that the **Win's** method clearly compares received metadata (see user inputted metadata) with required metadata (see stored passwords and roles) to output an appropriate set of resources via an HTML interface, based on the user's role. The examiner further wishes to state that the



resources of **Win** will only execute (i.e. appear on an HTML interface) if the User's has an acceptable role or security level.

Applicant goes on to argue on page 10, that **"In fact, Win is silent as to any determination of whether a functional module (resource) presented to a user will successfully execute, but rather is concerned only with a user's authentication"**. However, the examiner wishes to point to Column 6 of **Win** and refer to the second paragraph which states "a Personalized Menu is an HTML page containing a list of authorized resources. The Personalized Menus displays only Resources to which the User has access" (Column 6, lines 12-15). The examiner further wishes to point to Column 6 of **Win** and refer to the seventh paragraph which states "When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with resources protected by the Runtime Module decrypts information in the cookie and uses it to verify that he user is authorized to access the resource" (Column 6, lines 58-64). The examiner further wishes to state that the **Win's** method clearly compares received metadata (see user inputted metadata) with required metadata (see stored passwords and roles) to output an appropriate set of resources via an HTML interface, based on the user's role. The examiner further wishes to state that the resources of **Win** will only execute (i.e. appear on an HTML interface) if the User's has an acceptable role or security level.

Applicant goes on to argue on page 11, that **"the references would fail to teach identifying a subset of functional modules base don a comparison of collected runtime metadata with metadata requirements that specify conditions required for successful execution of the functional modules, as recited in independent claim 10"**. However, the examiner wishes to point to Column 6 of **Win** and refer to the second paragraph which states "a Personalized Menu is an HTML page containing a list of authorized resources. The Personalized Menus displays only Resources to which the User has access" (Column 6, lines 12-15). The examiner further wishes to point to Column 6 of **Win** and refer to the seventh paragraph which states "When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with

resources protected by the Runtime Module decrypts information in the cookie and uses it to verify that he user is authorized to access the resource" (Column 6, lines 58-64). The examiner further wishes to state that the **Win's** method clearly compares received metadata (see user inputted metadata) with required metadata (see stored passwords and roles) to output an appropriate set of resources via an HTML interface, based on the user's role.

Applicant goes on to argue on page 11, that **"there is no teaching of limiting a set of functional modules presented to a user to those that will successfully executed, as determined by a comparison of the collected runtime metadata and a set of associated metadata requirements"**. However, the examiner wishes to point to Column 6 of **Win** and refer to the second paragraph which states "a Personalized Menu is an HTML page containing a list of authorized resources. The Personalized Menus displays only Resources to which the User has access" (Column 6, lines 12-15). The examiner further wishes to point to Column 6 of **Win** and refer to the seventh paragraph which states "When the user selects a resource, a browser sends an open URL request and cookie to a Protected Web Server. A Protected Web Server is a web server with resources protected by the Runtime Module decrypts information in the cookie and uses it to verify that he user is authorized to access the resource" (Column 6, lines 58-64). The examiner further wishes to state that the **Win's** method clearly compares received metadata (see user inputted metadata) with required metadata (see stored passwords and roles) to output an appropriate set of resources via an HTML interface, based on the user's role.

#### ***Response to Arguments***

9. Applicant's arguments with respect to claims 10-12, 14-21, and 27-32 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. PGPUB 2002/0083075 issued to **Brummel et al.** on 27 June 2002. The subject matter disclosed therein is pertinent to that of claims 10-12, 14-21, and 27-32 (e.g., methods to use plug-ins in an interface for role-based users).

U.S. Patent 6,757,898 issued to **Ilsen et al.** on 29 June 2004. The subject matter disclosed therein is pertinent to that of claims 10-12, 14-21, and 27-32 (e.g., methods to use plug-ins in an interface for role-based users).

U.S. PGPUB 2003/0140043 issued to **Hotchkiss et al.** on 24 July 2003. The subject matter disclosed therein is pertinent to that of claims 10-12, 14-21, and 27-32 (e.g., methods to use plug-ins in an interface for role-based users).

U.S. PGPUB 20040249674 issued to **Eisenberg** on 09 December 2004. The subject matter disclosed therein is pertinent to that of claims 10-12, 14-21, and 27-32 (e.g., methods to use plug-ins in an interface for role-based users).

U.S. PGPUB 2003/0229623 issued to **Chang et al.** on 11 December 2003. The subject matter disclosed therein is pertinent to that of claims 10-12, 14-21, and 27-32 (e.g., methods to use plug-ins in an interface for role-based users).

U.S. PGPUB 2002/0091836 issued to **Moetelli** on 11 July 2002. The subject matter disclosed therein is pertinent to that of claims 10-12, 14-21, and 27-32 (e.g., methods to use plug-ins in an interface for role-based users).

U.S. Patent 6,430,556 issued to **Goldberg et al.** on 06 August 2002. The subject matter disclosed therein is pertinent to that of claims 10-12, 14-21, and 27-32 (e.g., methods to use plug-ins in an interface for role-based users).

U.S. Patent 7,027,975 issued to **Pazandak et al.** on 11 April 2006. The subject matter disclosed therein is pertinent to that of claims 10-12, 14-21, and 27-32 (e.g., methods to use plug-ins in an interface for role-based users).

#### **Contact Information**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mahesh Dwivedi  
Patent Examiner  
Art Unit 2168

February 12, 2010  
/Mahesh H Dwivedi/  
Examiner, Art Unit 2168